

### **DEFENSE INFORMATION SYSTEMS AGENCY**

P. O. BOX 549 FORT MEADE, MARYLAND 20755-0549

 $\begin{array}{l} {}_{\text{\tiny NREPLY}} \\ {}_{\text{\tiny REFER TO:}} \end{array} \ Joint \ Interoperability \ Test \ Command \ (JTE) \end{array}$ 

17 Feb 15

### MEMORANDUM FOR DISTRIBUTION

Revision 1

SUBJECT: Extension of the Joint Interoperability Certification of the Cisco Enterprise Session Controller (ESC) 8

References: (a) Department of Defense Instruction 8100.04, "DoD Unified Capabilities (UC)," 9 December 2010

- (b) Office of the Department of Defense Chief Information Officer, "Department of Defense Unified Capabilities Requirements 2013, Errata 1," 1 July 2013
- (c) through (e), see Enclosure 1
- 1. **Certification Authority.** Reference (a) establishes the Joint Interoperability Test Command (JITC) as the Joint Interoperability Certification Authority for the UC products.
- 2. **Conditions of Certification.** The Cisco ESC 8; hereinafter referred to as the System Under Test (SUT), meets the critical requirements of the Unified Capabilities Requirements (UCR), Reference (b), and is certified for joint use as an ESC in Type 1, 2, and 3 environments and as a Local Session Controller (LSC) with the conditions described in Table 1. This certification expires upon changes that affect interoperability, but no later than 27 June 2017, which is three years from the date of the original UC Approved Products List (APL) memorandum. Desktop Review (DTR) 4 was requested to update the SUT Cisco Webex Meeting Server from Release 2.0 to 2.5 and remove the Cisco MeetingPlace Server from the SUT. See paragraph 4 for the test details.

**Table 1. Conditions** 

| Condition  | Operational<br>Impact | Remarks               |
|--|-----------------------|-----------------------|
| UCR Waivers  |                       |                       |
| None.  |                       |                       |
| Conditions of Fielding   |                       |                       |
| None.  |                       |                       |
| Open Test Discrepancies  |                       |                       |
| The SUT video end instruments include H.323 proprietary ROUTINE only end instruments depicted in Table 4. Additionally the SUT includes a Jabber client that offers video and voice; however, during the original test the Jabber client was certified for audio only as a soft phone and for XMPP IM&P as an XMPP client. | None                  | CLOSED<br>See note 1. |
| Per the vendor's LoC, the SUT does not display weighted Terminal Coupling Loss (TCLw) and equipment impairment factor in their call detail record (CDR).  Minor  See note  |                       |                       |
| Per the vendor's LoC, the does not fully meet separate video and voice ASAC counts.  | Minor                 | See note 2.           |

**Table 1. Conditions (continued)** 

| Condition   | Operational<br>Impact | Remarks               |
|---|-----------------------|-----------------------|
| Open Test Discrepancies (continued)   |                       |                       |
| The SUT does not properly handle signaling events when setting up an inter-switch V.150 secure call with Avaya Communication Manager (CM) 6.0.  | Minor                 | See note 3.           |
| Per the vendor's LoC, the SUT proprietary video EI does not provide the ability to enable or disable the transmission destination unreachable msg.  | Minor                 | See note 2.           |
| Per the vendor's LoC, the SUT fails to immediately divert all precedence above routine calls placed to ROEIs. The SUT diverts only when the ROEI is busy if it is idle it will offer the call and divert if not answered.   | Minor                 | See note 2.           |
| During the original test, video calls between SUT H.323 PEIs (C90/EX90/SX20) and other UC video endpoints dropped at approximately 30 minutes.  | None                  | CLOSED<br>See note 4. |
| The SUT fails to answer with correct payload number per RFC 3264. Instead, of responding to the V.150.1 payload numbers in an SDP, offer the SUT always responds with payload number of 118 and 120 for State Signaling Events (SSE) and Simple Packet Relay Transport (SPRT) respectively which prevents successful secure call attempts.  | Minor                 | See note 3.           |
| Per the vendor's LoC, the SUT does not support an AS-SIP ESC to EI signaling interface.   | Minor                 | See note 3.           |
| Per the vendor's LoC, the SUT supports Primary Rate Interface requirement to be in compliance with ANSI T1.619-1992 and T1.619a-1994 with following exception, NFAS is not supported.   | Minor                 | See note 2.           |
| Per the vendor's LoC, the SUT does not support Public Key Infrastructure Requirement IA-049030.   | Minor                 | See note 5.           |
| Per the vendor's LoC, the SUT does not support Confidentiality requirement IA-069040.   | Minor                 | See note 5.           |
| The SUT 9951/9971 voice/video SIP ROEIs do not fully support inter-enclave hold feature while video enabled.  | Minor                 | See note 6.           |
| Per the vendor's LoC, the SUT does not support a persistent TLS connection between AEIs and the enclave fronted SBC because the SUT does not support AEIs.  | Minor                 | See note 3.           |
| Per the vendor's LoC, the SUT video conferencing system does not support all required audio codecs. The SUT does not support the G.723.1 audio codec.   | Minor                 | See note 2.           |
| Per the vendor's LoC, the SUT partially complies with the EDS gateway requirements per SCM-005300.  | Minor                 | CLOSED<br>See note 7. |
| When the SUT MCU 5320 places an outbound video call to other SUT C90 and SX20 video endpoints in either environment 1 or environment 2, the call drops at exactly 15 minutes.   | Minor                 | See note 3.           |
| The SUT SX20 and C90 configured on environment 2 are not able to establish two-way video calls with the Polycom RMX UCCS. The SUT SX20 configured on environment 1 or environment 2 is not able to establish two-way video calls with the Vidyo UCCS. These anomalies occur when the SX20 and C90 are registered to the ESC Environments and do not occur when these endpoints are registered to the LSC. | Minor                 | See note 3.           |
| Per the vendor's LoC, the SUT does not correctly respond to stream errors. Instead of responding with a stream error and closing the stream, the server terminates the connection non-gracefully.   | Minor                 | See note 3.           |
| Per the vendor's LoC, the SUT does not generate a new Client-to-Server Stream. Server reuses the old stream ID instead of generating a new stream ID.   | Minor                 | See note 3.           |
| Per the vendor's LoC, the SUT does not include empty element in its advertisement of the SASL.  | Minor                 | See note 8.           |
| Per the vendor's LoC, the SUT does not fully comply with SASL failure requirements. The SUT does not comply with requirements IM-000710, IM-000720, and IM-000730.  | Minor                 | See note 3.           |
| Per the vendor's LoC, the SUT does not fully meet deleting a roster item requirement. The SUT does not comply with requirements IM-001310 and IM-001320.  | Minor                 | See note 3.           |
| Per the vendor's LoC, the SUT partially complies with rules for Server Processing of Outbound Subscription Requests. The SUT does not comply with requirement IM-001350. Server sends presence type "unsubscribed" with status Not Found.   | Minor                 | See note 3.           |
| Per the vendor's LoC, the SUT partially complies with the rules for server processing of outbound subscription cancellation. The SUT partially complies with requirement IM-001500. Upon receiving the outbound subscription cancellation, the contact's server does not send a presence stanza of type "unavailable" from all of the contacts online resources to the user.                              | Minor                 | See note 2.           |
| Per the vendor's LoC, the SUT partially complies with the rules for server processing of inbound unsubscribe. The SUT partially complies with requirement IM-001540.  | Minor                 | See note 2.           |
| Per the vendor's LoC, the SUT does not comply with server generation of inbound presence probe.   | Minor                 | See note 3.           |
| The SUT Unified Presence Server establishes SASL external authentication with the incorrect domain name.  | Minor                 | See note 3.           |

**Table 1. Conditions (continued)** 

| Condition  | Operational<br>Impact | Remarks               |
|--|-----------------------|-----------------------|
| Open Test Discrepancies (continued)  |                       |                       |
| The SUT does not comply to the requirements in XMPP Extension XEP-0045 (multi-user chat). The SUT does not host or participate in multi-user chat/chat rooms as required by the reference. | Minor                 | See note 3.           |
| The SUT Jabber Video Client when calling the Polycom Group series video EI has 1-way audio.  | Minor                 | CLOSED<br>See note 1. |
| The SUT does not support Local RTS Database (LRDB).  | Minor                 | See note 2.           |
| The SUT does not support Master RTS Database (MRDB).   | Minor                 | See note 2.           |

#### NOTES:

- 1. During the original test, the SUT Jabber Video Client when calling the Polycom Group series video EI had 1-way audio. In the original certification, the Jabber client was certified for audio only as a soft phone and for XMPP IM&P as an XMPP client. The video discrepancy was fixed and the video capability of Jabber client was successfully tested during the DTR 2 test window. See the deployment guide for the configuration change.
- 2. DISA has adjudicated this discrepancy as minor and stated the intent to change this requirement in the next version of the UCR.
- 3. DISA has accepted the vendor's POA&M and has adjudicated this discrepancy as minor.
- 4. During the original test, video calls between SUT H.323 PEIs (C90/EX90/SX20) and other UC video endpoints dropped at approximately 30 minutes. This discrepancy with call drops at 30 minutes was fixed and successfully tested with DTR 1, which included updated VCS software release x8.1.1.
- 5. DISA has adjudicated this discrepancy as minor and stated the intent to remove this requirement from the UCR and apply it to a DoD STIG.
- 6. DISA has accepted the vendor's POA&M and has adjudicated this discrepancy as minor. In addition, the 9951/9971 voice/video SIP ROEI is not covered under this certification.
- 7. This discrepancy applies only to the SUT configured as an ESC. DISA has accepted the vendor's POA&M and has adjudicated this discrepancy as minor. In the interim, the LiteScape EDS Gateway has been successful with posting their LiteScape EDS gateway on the UC APL under tracking number 1412803. LiteScape is certified on the UC APL only with the SUT. The SUT now meets the EDS ESC minimum essential interoperability requirements with the LiteScape EDS Gateway.
- 8. DISA has adjudicated this discrepancy as minor.

### LEGEND:

| AEI    | AS-SIP End Instrument                        | PEI   | Proprietary End Instrument                 |
|--------|--|-------|--|
| ANSI   | American National Standards Institute        | POA&M | Plan of Action and Milestones              |
| APL    | Approved Products List                       | RFC   | Request for Comments                       |
| ASAC   | Assured Services Admission Control           | ROEI  | ROUTINE Only End Instrument                |
| AS-SIP | Assured Services Session Initiation Protocol | SASL  | Simple Authentication and Security Layer   |
| CUPS   | Cisco Unified Presence Server                | SBC   | Session Border Controller                  |
| DISA   | Defense Information System Agency            | SDP   | Session Description Protocol               |
| DN     | Directory Number                             | SIP   | Session Initiation Protocol                |
| DTR    | Desktop Review                               | SUT   | System Under Test                          |
| EDS    | Enterprise Directory Services                | STIG  | Security Technical Implementation Guide    |
| EI     | End Instrument                               | TLS   | Transport Layer Security                   |
| ESC    | Enterprise Session Controller                | UC    | Unified Capabilities                       |
| ID     | identification                               | UCCS  | Unified Capabilities Conference System     |
| IM/P   | Instant Messaging/Presence                   | UCR   | Unified Capabilities                       |
| LoC    | Letter of Compliance                         | VCS   | Video Communication Server                 |
| MCU    | Multipoint Control Unit                      | XMPP  | Extensible Messaging and Presence Protocol |
| NFAS   | Non Facility Associated Signaling            |       |  |

3. **Interoperability Status.** Table 2 provides the SUT interface interoperability status and Table 3 provides the Capability Requirements (CR) and Functional Requirements (FR) status. Table 4 provides the UC APL product summary.

**Table 2. Interface Status** 

| Interface                         | Threshold CR/FR Requirements (See note.)                                    | Status       | Remarks  |
|-----------------------------------|---|--------------|--|
|                                   | Network   | Managemer    | nt Interfaces  |
| 10BaseT (R)                       | 4, 6, 9, 13, 16, 20, 21, 23, 24   | Certified    | The SUT met the critical CRs and FRs for the IEEE 802.3i interface.  |
| 100BaseT (R)                      | 4, 6, 9, 13, 16, 20, 21, 23, 24   | Certified    | The SUT met the critical CRs and FRs for the IEEE 802.3u interface.  |
| 1000BaseT (C)                     | 4, 6, 9, 13, 16, 20, 21, 23, 24   | Certified    | The SUT met the critical CRs and FRs for the IEEE 802.3ab interface.   |
|                                   | Network In  | terfaces (Li | ne and Trunk)  |
| 10BaseT (R)                       | 1, 5, 6, 7, 8, 10, 11, 13, 14,<br>15, 17, 18, 19, 20, 21, 22, 23,<br>24, 25 | Certified    | The SUT met the critical CRs and FRs for the IEEE 802.3i interface with the SUT PEIs and softphones.                                   |
| 100BaseT (R)                      | 1, 5, 6, 7, 8, 10, 11, 13, 14,<br>15, 17, 18, 19, 20, 21, 22, 23,<br>24, 25 | Certified    | The SUT met the critical CRs and FRs for the IEEE 802.3u interface with the SUT PEIs and softphones.                                   |
| 1000BaseT (R)                     | 1, 5, 6, 7, 8, 10, 11, 13, 14,<br>15, 17, 18, 19, 20, 21, 22, 23,<br>24, 25 | Certified    | The SUT met the critical CRs and FRs for the IEEE 802.3ab interface with the SUT PEIs and softphones.                                  |
| 2-wire analog (R)                 | 1, 8, 15, 17, 19, 20, 21, 22,<br>23   | Certified    | The SUT met the critical CRs and FRs for the 2-wire analog interface with the SUT 2-wire secure and non-secure analog instruments.     |
| ISDN BRI (C)                      | 1, 8, 15, 17, 19, 20, 21, 22,<br>23   | Not Tested   | The SUT offers this interface; however, it was not tested because it does not support Assured Services and is not required for an ESC. |
|                                   | Legacy  | Interfaces ( | External)  |
| 10BaseT (C)                       | 2, 3, 5, 6, 7, 8, 11, 13, 18, 20,<br>21, 23, 24, 25                         | Certified    | The SUT met the critical CRs/FRs for IEEE 802.3i for the AS-SIP trunk.   |
| 100BaseT (C)                      | 2, 3, 5, 6, 7, 8, 11, 13, 18, 20,<br>21, 23, 24, 25                         | Certified    | The SUT met the critical CRs/FRs for IEEE 802.3u for the AS-SIP trunk.   |
| 1000BaseT (C)                     | 2, 3, 5, 6, 7, 8, 11, 13, 18, 20,<br>21, 23, 24, 25                         | Certified    | The SUT met the critical CRs/FRs for IEEE 802.3ab for the AS-SIP trunk.  |
| ISDN T1 PRI (ANSI<br>T1.619a) (R) | 3, 9, 12, 14, 22, 20, 21, 23  | Certified    | The SUT met the critical CRs/FRs. This interface provides legacy DSN and TELEPORT connectivity.  |
| ISDN T1 PRI NI-2 (R)              | 3, 9, 12, 14, 22, 20, 21, 23  | Certified    | The SUT met the critical CRs/FRs. This interface provides PSTN connectivity.   |
| T1 CCS7 (ANSI T1.619a)<br>(C)     | 3, 9, 12, 14, 20, 21, 22, 23  | Not Tested   | The SUT does not support this conditional interface.   |
| T1 CAS (C)                        | 3, 9, 12, 14, 20, 21, 22, 23  | Certified    | The SUT met threshold CRs/FRs for DTMF.  |
| E1 PRI (ITU-T Q.955.3) (C)        | 3, 9, 12, 14, 20, 21, 22, 23  | Certified    | The SUT met the critical CRs/FRs. This interface provides OCONUS MLPP connectivity in ETSI-compliant countries.                        |
| E1 PRI (ITU-T Q.931) (C)          | 3, 9, 12, 14, 20, 21, 22, 23  | Certified    | The SUT met the critical CRs/FRs. This interface provides OCONUS connectivity in ETSI-compliant countries.                             |
|                                   |   |              | d CRs/FRs column can be cross-referenced in Table 3. These d in Reference (c), Enclosure 3.  |

**Table 2. Interface Status (continued)** 

| LEGEND:   |   |         |   |
|-----------|---|---------|---|
| 10BaseT   | 10 Mbps Ethernet                                | IEEE    | Institute of Electrical and Electronics Engineers |
| 100BaseT  | 100 Mbps Ethernet                               | ISDN    | Integrated Services Digital Network               |
| 1000BaseT | 1000 Mbps Ethernet                              | ITU-T   | International Telecommunication Union -           |
| ANSI      | American National Standards Institute           |         | Telecommunication Standardization Sector          |
| AS-SIP    | Assured Services Session Initiation Protocol    | Mbps    | Megabits per second                               |
| BRI       | Basic Rate Interface                            | MLPP    | Multi-Level Precedence and Preemption             |
| C         | Conditional                                     | NI-2    | National ISDN Standard 2                          |
| CAS       | Channel Associated Signaling                    | OCONUS  | Outside the Continental United States             |
| CCS7      | Common Channel Signaling Number 7               | PEI     | Proprietary End Instrument                        |
| CR        | Capability Requirement                          | PRI     | Primary Rate Interface                            |
| DSN       | Defense Switched Network                        | PSTN    | Public Switched Telephone Network                 |
| DTMF      | Dual Tone Multi-Frequency                       | Q.931   | Signaling Standard for ISDN                       |
| E1        | European Basic Multiplex Rate (2.048 Mbps)      | Q.955.3 | ISDN Signaling Standard for E1 MLPP               |
| ESC       | Enterprise Session Controller                   | R       | Required  |
| ETSI      | European Telecommunications Standards Institute | SS7     | Signaling System 7                                |
| FR        | Functional Requirement                          | T1      | Digital Transmission Link Level 1 (1.544 Mbps)    |
| ID        | Identification                                  | T1.619a | SS7 and ISDN MLPP Signaling Standard for T1       |

Table 3. SUT Capability Requirements and Functional Requirements Status

| CR/FR<br>ID | UCR Requirement (High-Level) (See note 1.)  | UCR 2013<br>Reference | Status                                   |
|-------------|---|-----------------------|--|
| 1           | Voice Features and Capabilities (R)   | 2.2                   | Partially Met (See note 2.)              |
| 2           | Assured Services Admission Control (R)  | 2.3                   | Met                                      |
| 3           | Signaling Protocols (R)   | 2.4                   | Met                                      |
| 4           | Registration and Authentication (R)   | 2.5                   | Met                                      |
| 5           | SC and SS Failover and Recovery (R)   | 2.6                   | Met                                      |
| 6           | Product Interface (R)   | 2.7                   | Met                                      |
| 7           | Product Physical, Quality, and Environmental Factors (R)                                  | 2.8                   | Met                                      |
| 8           | End Instruments (including tones and announcements) (R)                                   | 2.9                   | Partially Met (See note 2.)              |
| 9           | Session Controller (R)  | 2.10                  | Met                                      |
| 10          | AS-SIP Gateways (C)   | 2.11                  | Met (See note 3.)                        |
| 11          | Enterprise UC Services (R)  | 2.12                  | Partially Met (See notes 2<br>4, and 5.) |
| 12          | Call Connection Agent (R)   | 2.14                  | Met                                      |
| 13          | CCA Interaction with Network Appliances and Functions (R)                                 | 2.15                  | Met                                      |
| 14          | Media Gateway (R)   | 2.16                  | Met                                      |
| 15          | Worldwide Numbering & Dialing Plan (R)  | 2.18                  | Met                                      |
| 16          | Management of Network Devices (R)   | 2.19                  | Partially Met (See note 2.)              |
| 17          | V.150.1 Modem Relay Secure Phone Support (R)  | 2.20                  | Partially Met (See note 2.)              |
| 18          | Requirements for Supporting AS-SIP Based Ethernet Devices for Voicemail Systems (C)       | 2.21                  | Not Tested                               |
| 19          | Local Attendant Console Features (O)  | 2.22                  | Not Tested                               |
| 20          | MSC and SSC (O)   | 2.23                  | Not Tested (See note 6.)                 |
| 21          | MSC, SSC, and Dynamic ASAC Requirements in Support of Bandwidth-<br>constrained links (O) |                       | Not Tested (See note 7.)                 |
| 22          | Other UC Voice (R)  |                       | Partially Met (See note 2.)              |
| 23          | Information Assurance Requirements (R)  | 4                     | Partially Met (See notes 2 and 7.)       |
| 24          | IPv6 Requirements (R)   | 5                     | Partially Met (See note 2.)              |
| 25          | Assured-Services (AS) Session Initiation Protocol (SIP) (AS-SIP 2013) (R)                 | AS-SIP                | Partially Met (See note 2.)              |

# Table 3. SUT Capability Requirements and Functional Requirements Status (continued)

### NOTES:

- 1. The annotation of 'required' refers to a high-level requirement category. The applicability of each sub-requirement is provided in Reference (c), Enclosure 3.
- 2. The SUT met the requirements with the exceptions noted in Table 1. DISA adjudicated these exceptions as minor.
- 3. During the original test, video calls between SUT H.323 PEIs (C90/EX90/SX20) and other UC video endpoints dropped at approximately 30 minutes. This discrepancy was fixed and successfully tested with DTR 1, which included VCS software release x8.1.1.
- 4. These requirements apply specifically to an Enterprise Session Controller.
- 5. During the original test, the SUT Jabber Video Client when calling the Polycom Group series video EI had 1-way audio. In the original certification, the Jabber client was certified for audio only as a soft phone and for XMPP IM&P as an XMPP client. The video discrepancy was fixed and the video capability of Jabber client was successfully tested during the DTR 2 test window. See the deployment guide for the configuration change.
- 6. This optional requirement applies specifically to a Local Session Controller.
- 7. Security is tested by DISA-led Information Assurance test teams and the results published in a separate report, Reference (e).

### LEGEND:

| AS-SIP | Assured Services Session Initiation Protocol | O   | Optional                          |
|--------|--|-----|-----------------------------------|
| C      | Conditional                                  | PEI | Proprietary End Instrument        |
| CCA    | Call Connection Agent                        | R   | Required                          |
| CR     | Capability Requirement                       | SC  | Session Controller                |
| DISA   | Defense Information System Agency            | SS  | Softswitch                        |
| DTR    | Desktop Review                               | SUT | System Under Test                 |
| FR     | Functional Requirement                       | UC  | Unified Capabilities              |
| ID     | Identification                               | UCR | Unified Capabilities Requirements |
| IPv6   | Internet Protocol version 6                  | VCS | Video Communication Server        |

## **Table 4. UC APL Product Summary**

| Product Identification           |   |                      |             |
|----------------------------------|---|----------------------|-------------|
| Product Name                     | Cisco Enterprise Session Controller (ESC) 8   |                      |             |
| Software Release                 | 8   |                      |             |
| UC Product Type(s)               | Enterprise Session Controller (ESC) or Local Session Controller   |                      |             |
| Product Description              | Enterprise Session Controller for Type 1, 2, and 3 Environments or  | as a Local Session C | ontroller   |
| Product Components (See note 1.) | Component Name (See notes 2 and 3.)   | Version              | Remarks     |
| Unified Communications Manager   | Cisco Unified Communications Manager  | 8.6                  |             |
| Session Management Edition       | Cisco Session Management Edition  | 8.6                  |             |
| Unified Communications Manager   | Cisco Unified Communications Manager  | 8.6                  |             |
| Cisco Unity Connection           | Cisco Unity Connection  | 8.6                  |             |
| Cisco Unified Presence Server    | Cisco Unified Presence Server   | 8.6                  |             |
| Cisco Webex Meeting Server       | Cisco Webex Meeting Server  | 2.5 (See note 4.)    |             |
| E911 management system           | RedSky E911 Management System   | 6.3.1                | See note 5. |
| Interworking Gateway             | IWG on 3925 ISR G2, IWG on 3925E ISR G2, <u>IWG on 3945</u><br><u>ISR G2</u> , IWG on 3945E ISR G2                  | IOS 15.2(4)M5        |             |
| Session Border Controller        | SBC on 3925 ISR G2, SBC on 3925E ISR G2, <u>SBC on 3945 ISR</u> <u>G2</u> , SBC on 3945E ISR G2                     | IOS 15.2(4)M5        |             |
| Session Border Controller        | SBC on ISR 4451-X Router  | IOS-XE 3.11          |             |
| Session Border Controller        | SBC on ASR 1002, SBC on ASR 1002-X, SBC on ASR 1004, SBC on ASR 1006  | IOS-XE 3.11          |             |
| Voice Gateway                    | 2901 ISR G2, 2911 ISR G2, 2921 ISR G2, 2951 ISR G2, 3925<br>ISR G2, 3925E ISR G2, <b>3945 ISR G2</b> , 3945E ISR G2 |                      |             |
| Analog Voice Gateway             | VG350 Analog Voice Gateway  | IOS 15.2(4)M5        |             |
| Jabber                           | Cisco Jabber for Windows  | 9.2                  | See note 6. |
| IP Phone                         | Unified IP Phone 6901   | 9.2.1                |             |
| IP Phone                         | Unified IP Phone 6911   | 9.2.1                |             |

**Table 4. UC APL Product Summary (continued)** 

| Product Components (See note 1.)                    |  |                         | Remarks     |  |
|---|--|-------------------------|-------------|--|
| IP Phone  | Unified IP Phone 6911  | 9.2.1                   |             |  |
| IP Phone  | Unified IP Phone 6921  | 9.2.1                   |             |  |
| IP Phone  | Unified IP Phone 6941  | 9.2.1                   |             |  |
| IP Phone  | Unified IP Phone 6945  | 9.2.1                   |             |  |
| IP Phone  | Unified IP Phone 6961  | 9.2.1                   |             |  |
| IP Phone  | Unified IP Phone 7821  | 10.1.1.9                |             |  |
| IP Phone  | Unified IP Phone 7841  | 10.1.1.9                |             |  |
| IP Phone  | Unified IP Phone 7861  | 10.1.1.9                |             |  |
| IP Phone  | Unified IP Phone 7906G   | 9.3.1                   |             |  |
| IP Phone  | Unified IP Phone 7911G   | 9.3.1                   |             |  |
| IP Phone  | Unified IP Phone 7931G   | 9.3.1                   |             |  |
| IP Phone  | Unified IP Phone 7941G   | 9.3.1                   |             |  |
| IP Phone  | Unified IP Phone 7941G-GE  | 9.3.1                   |             |  |
| IP Phone  | Unified IP Phone 7942G   | 9.3.1                   |             |  |
| IP Phone  | Unified IP Phone 7945G   | 9.3.1                   |             |  |
| IP Phone  | Unified IP Phone 7961G   | 9.3.1                   |             |  |
| IP Phone  | Unified IP Phone 7961G-GE  | 9.3.1                   |             |  |
| IP Phone  | Unified IP Phone 7962G   | 9.3.1                   |             |  |
| IP Phone  | Unified IP Phone 7965G   | 9.3.1                   |             |  |
| IP Phone  | Unified IP Phone 7970G   | 9.3.1                   |             |  |
| IP Phone  | Unified IP Phone 7971G   | 9.3.1                   |             |  |
| IP Phone  | Unified IP Phone 7975G   | 9.3.1                   |             |  |
| IP Phone  | Unified IP Phone Expansion Module 7915                                 | Not Applicable          |             |  |
| IP Phone  | Unified IP Phone Expansion Module 7916                                 | Not Applicable          |             |  |
| IP Conference Phone                                 | IP Conference Station 8831   | 9.3.3.5                 |             |  |
| IP Phone  | Unified IP Phone 8961  | 9.4.1                   |             |  |
| IP Phone  | Unified IP Phone 9951  | 9.4.1                   | See note 7. |  |
| IP Phone  | Unified IP Phone 9971  | 9.4.1                   | See note 7. |  |
| IP Phone Expansion Module                           | Unified IP Color Key Expansion Module                                  | Not Applicable          |             |  |
| Secure Phone  | CIS Secure DTD-7965-TSGB   | 9.3.1                   |             |  |
| Secure Phone  | CIS Secure DTD-7962-TSG-01   | 9.3.1                   |             |  |
| Secure Phone  | CIS Secure DTD-7962-T2   | 9.3.1                   |             |  |
| Secure Phone  | Telecore 2151  | 2AE-00199-0301          |             |  |
| Video Teleconference                                | TelePresence Video Communication Server (VCS)                          | X8.1.1<br>(See note 8.) |             |  |
| Video Teleconference                                | TelePresence QuickSet C20  | TC7.1.1                 |             |  |
| Video Teleconference                                | TelePresence Codec C40, TelePresence Codec C60, TelePresence Codec C90 | TC7.1.1                 |             |  |
| Video Teleconference                                | TelePresence EX60, TelePresence EX90                                   | TC7.1.1                 |             |  |
| Video Teleconference                                | TelePresence MX200, TelePresence MX300                                 | TC7.1.1                 |             |  |
| Video Teleconference                                | TelePresence SX20 QuickSet, TelePresence MX300 G2                      | TC7.1.1                 |             |  |
| Video Teleconference                                | TelePresence 5300 MCU  | 4.4(1.68)               |             |  |
| Common Access Card/Single sign-<br>on solution      | <u>OpenAM</u>  | 11.0<br>(See note 9.)   |             |  |
| Common Access Card support for WebEx Meeting Server | Cisco ASA  | 8.4(3)                  |             |  |

### **Table 4. UC APL Product Summary (continued)**

#### NOTES:

- 1. The detailed component and subcomponent list is provided in Reference (c), Enclosure 3.
- 2. Components bolded and underlined were tested by JITC. The other components in the family series were not tested but are also certified for joint use. JITC certifies those additional components because they utilize the same software and similar hardware and JITC analysis determined them to be functionally identical for interoperability certification purposes.
- 3. A comprehensive list of supported hardware configurations can be found by selecting the "Cisco Unified Communications on the Cisco Unified Computing System" link at the following URL: <a href="https://www.cisco.com/go/swonly">www.cisco.com/go/swonly</a>.
- 4. The SUT Cisco Webex Meeting Server (CWMS) was updated from Release 2.0 to 2.5 with DTR 4. This CWMS update includes support for preset conferencing and security revisions that included Single Sign On capability via Security Assertion Markup Language verison 2.0, which were successfully tested with DTR 4. In addition, DTR 4 documents the removal of the Cisco MeetingPlace Server from the SUT.
- 5. The SUT is certified with any RedSky E911 Management system or other E911 Management system listed on the UC APL and certified with the Cisco UCM. E911 management is not required for an LSC.
- 6. During the original test, the SUT Jabber Video Client when calling the Polycom Group series video EI had 1-way audio. In the original certification, the Jabber client was certified for audio only as a soft phone and for XMPP IM&P as an XMPP client. The video discrepancy was fixed and the video capability of Jabber client was successfully tested during the DTR 2 test window. See the deployment guide for the configuration change.
- 7. The SUT 9951/9971 voice/video SIP ROEIs do not fully support inter-enclave hold feature while video enabled. DISA has accepted the vendor's POA&M and has adjudicated this discrepancy as minor. In addition, the 9951/9971 voice/video SIP ROEI is not covered under this certification.
- 8. The VCS release was updated from x7.2.2 to x8.1.1 with DTR 1.
- 9. The OpenAM version was updated from 9.5.5 to 11.0 with DTR 5.

#### LEGEND:

| APL  | Approved Products List              | MCU   | Multipoint Conference Unit                 |
|------|-------------------------------------|-------|--|
| DISA | Defense Information System Agency   | POA&M | Plan of Action and Milestones              |
| DTR  | Desktop Review                      | ROEI  | ROUTINE Only End Instrument                |
| G2   | Generation 2                        | SBC   | Session Border Controller                  |
| IM/P | Instant Messaging/Presence          | SIP   | Session Initiation Protocol                |
| IP   | Internet Protocol                   | UC    | Unified Capabilities                       |
| ISR  | Integrated Services Router          | UCM   | Unified Communications Manager             |
| IWG  | Interworking Gateway                | VCS   | Video Communication Server                 |
| JITC | Joint Interoperability Test Command | XMPP  | Extensible Messaging and Presence Protocol |

4. **Test Details.** The extension of this certification is based upon DTR 4. The original certification, documented in Reference (c), is based on interoperability testing, DISA adjudication of open test discrepancy reports (TDRs), review of the vendor's Letters of Compliance (LoC), and DISA Certifying Authority (CA) Recommendation for inclusion on the UC APL. Testing was conducted under UCCO Tracking Number 1108301 from 11 July through 5 August 2011 on the SUT as an LSC. Additional testing of the LSC under UCCO Tracking Number 1108301 was conducted for Desktop Reviews and documented in extensions to the original certification. Testing was conducted from 7 April through 9 May 2014 on the Cisco UCM as an ESC. The data from the LSC test is included in this certification. The test procedures derived from the UCR Reference (b) using test procedures derived from Reference (d) were used to validate the deltas between a Local Session Controller (LSC) and an ESC. Review of the vendor's LoC was completed on 7 April 2014. DISA adjudication of outstanding TDRs was completed on 10 June 2014. Information Assurance (IA) testing was conducted by DISA-led Information Assurance test teams and the results are published in a separate report, Reference (e). This DTR was requested to update the SUT Cisco Webex Meeting Server (CWMS) from Release 2.0 to 2.5 and to remove the Cisco MeetingPlace Server from the SUT. The CWMS update includes security modifications that include Single Sign On (SSO) capability via Security Assertion Markup Language (SAML) version 2.0 as well as support for preset conferencing. JITC determined that IA and interoperability Verification and Validation (V&V) testing was required. The IA V&V testing was successfully completed from 5 through 16 January 2015 and the results published in a separate report, Reference (e). JITC conducted interoperability V&V testing with no findings from 19 January through 6 February 2015.

Therefore, JITC approves this DTR. Enclosure 2 provides a list of errata changes to this certification since the original signature date.

- 5. Additional Information. JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) system, which uses Sensitive but Unclassified IP Data (formerly known as NIPRNet) e-mail. Interoperability status information is available via the JITC System Tracking Program (STP). STP is accessible by .mil/.gov users at https://stp.fhu.disa.mil/. Test reports, lessons learned, and related testing documents and references are on the JITC Joint Interoperability Tool (JIT) at https://jit.fhu.disa.mil/. Due to the sensitivity of the information, the Information Assurance Accreditation Package (IAAP) that contains the approved configuration and deployment guide must be requested directly from the Unified Capabilities Certification Office (UCCO), e-mail: disa.meade.ns.list.unified-capabilities-certification-office@mail.mil. All associated information is available on the DISA UCCO website located at http://www.disa.mil/Services/Network-Services/UCCO.
- 6. **Point of Contact (POC).** The JITC point of contact is Mr. Joseph Schulte, commercial telephone (520) 538-5100, DSN telephone 879-5100, FAX DSN 879-4347; e-mail address joseph.t.schulte.civ@mail.mil; mailing address Joint Interoperability Test Command, ATTN: JTE (Mr. Joseph Schulte) P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The UCCO tracking number for the SUT is 1331201.

FOR THE COMMANDER:

2 Enclosures a/s

for RIC HARRISON

Chief

Networks/Communications and UC Portfolio

Distribution (electronic mail):

DoD CIO

Joint Staff J-6, JCS

USD(AT&L)

ISG Secretariat, DISA, JTA

U.S. Strategic Command, J665

US Navy, OPNAV N2/N6FP12

US Army, DA-OSA, CIO/G-6 ASA(ALT), SAIS-IOQ

US Air Force, A3CNN/A6CNN

US Marine Corps, MARCORSYSCOM, SIAT, A&CE Division

US Coast Guard, CG-64

DISA/TEMC

DIA, Office of the Acquisition Executive

NSG Interoperability Assessment Team

DOT&E, Netcentric Systems and Naval Warfare

Medical Health Systems, JMIS IV&V

HQUSAISEC, AMSEL-IE-IS

UCCO

### ADDITIONAL REFERENCES

- (c) Joint Interoperability Test Command, Memo, JTE, "Joint Interoperability Certification of the Cisco Enterprise Session Controller (ESC) 8," 13 June 2014
- (d) Joint Interoperability Test Command, "Enterprise Session Controller (ESC) Test Procedures for Unified Capabilities Requirements (UCR) 2013," Draft
- (e) Joint Interoperability Test Command, "Information Assurance (IA) Findings Summary For Cisco ESC 8 (Tracking Number 1331201)," Draft

# **Joint Interoperability Certification Revision History (continued)**

| Revision | Date             | Approved By    | Comments   |
|----------|------------------|----------------|--|
| NA       | 17 February 2015 | Bradley Clark  | This is the original Extension of the Joint Interoperability Certification.  |
| 1        | 5 May 2015       | Joseph Schulte | <ul> <li>The following changes were made to update the 79xx, 8961, and 99x1 IP phones and the 8831 IP Conference Station from version 9.2.1 to the version tested.</li> <li>Memo, Page 7, Table 4. The 79xx series IP phones were updated from version 9.2.1 to 9.3.1.</li> <li>Memo, Page 7, Table 4. The 8831 IP Conference Station was updated from version 9.2.1 to 9.3.3.5.</li> <li>Memo, Page 7, Table 4. The 8961, 9951, and 9971 IP phones were updated from version 9.2.1 to 9.4.1.</li> </ul> |
| LEGEND:  |                  |                |  |
| IP In    | nternet Protocol |                |  |
| NA N     | Not Applicable   |                |  |